Petar Peychev

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Software Engineer with nearly 3 years of experience, able to quickly learn new technologies, understand the big picture, and build effective software. Experienced primarily in big data, but with diverse interests spanning low-level systems programming, compiler engineering, game development, backend web development, and distributed systems. My guiding principle is managing complexity and ensuring every solution is as simple as possible, but no simpler.

Experience

Data Engineer (Associate) - The Very Group
September 2022 - Present

Building a modern data lakehouse, developing tools for ETL and orchestration, and creating data pipelines for regulatory compliance, customer experience and business insights.

- Developed a YAML framework for low-code ETL workloads, now used across 50+ data pipelines. Currently upgrading it to be used as a Python library for tasks orchestrated by Mage.

- Built data pipelines for an in-house insurance/warranty system, Salesforce CRM and CallMiner speech analytics, ensuring compliance and boosting insights.

- Improved software quality with static type checking for Python, complexity metrics, and test coverage in CI/CD pipelines and pre-commit hooks, alongside contributing coding standards for Python and Scala.

Tools - Python (PySpark), Scala, SQL, AWS, Terraform, Docker, Kubernetes, Gitlab, Jenkins, Atlassian Suite.

Product Engineer - Jaguar Land Rover
September 2020 - September 2021

Teamed up with data scientists, analysts and engineers to build software for analysing autonomous driving systems performance.

- Built a testing framework with Behave and Jira Xray to verify autonomous driving systems, reducing production defects.

- Created a web application for visualizing time-series data and video, simplifying diagnosis of autonomous system failures.

- Upgraded data validation by moving from SQL scripts to Great Expectations, enhancing data quality.

Tools - Python (Pandas, Numpy), SQL, GCP, Terraform, JavaScript (JQuery), HTML, CSS, Docker, Kubernetes, GitLab, Atlassian Suite, Tableau.

Education

BSc (Hons) Computer Science - Nottingham Trent University
First Class Honours | September 2018 - September 2022

Awarded department award for excellent overall performance, managed the Developers' Society, organised hackathons (Global Game Jam), workshops and regularly attended conferences and local meetups (Tech Nottingham).

Interests

Languages & Compilers - I often create toy languages to delve into areas like concatenative and functional programming, refinement and structural type systems. Additionally, I stay updated on emerging languages by listening to podcasts, reading articles, and tracking developments in promising languages like Go, Rust, Zig, Odin, Jai, Roc, and Mojo.

Computational Curiosities - From learning the occasional new CLI tool to diving deep into Bartosz Milewski's "Category Theory for Programmers", I constantly explore the computational landscape. I enjoy learning about modern ideas, such as superoptimization, dependent type systems and functional data engineering, as well as looking to the past for wisdom from great minds like Joe Armstrong (Erlang), Ted Nelson (Xanadu), Manfred Von Thun (Joy), Ken Iverson (APL), Doug Engelbart (The Mother of All Demos).